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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,292	01/25/2005	Peter Schack	PC10486US	6410
23122	7590	09/22/2006	EXAMINER	
RATNERPRESTIA P O BOX 980 VALLEY FORGE, PA 19482-0980			WILLIAMS, THOMAS J	
			ART UNIT	PAPER NUMBER
			3683	

DATE MAILED: 09/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/522,292

Applicant(s)

SCHACK ET AL.

Examiner

Thomas J. Williams

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 13-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 January 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/25/05</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

1. Acknowledgment is made in receipt of the information disclosure statement, the priority papers and oath filed January 25, 2005.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the “electronic analyzer” as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The specification indicates that the electronic analyzer is not shown, see page 8 line 10.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The phrase "means" in line 3 should be removed.

4. The disclosure is objected to because of the following informalities: page 2 paragraph 10 line 2, the reference to claims 10 and 11 should be removed.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 19 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 19 recites the limitation "the strain gauge faces" in line 2. There is insufficient antecedent basis for this limitation in the claim.

8. Claim 20 recites the limitation "the contacting means" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 13, 14, 15 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6,405,836 to Rieth et al.

Re-claim 13, Rieth et al. disclose an actuating unit for an electromechanically actuated disc brake for use with automotive vehicles, which is disposed on a brake caliper wherein two friction linings 4/5 are disposed in a manner limitedly displaceable, cooperating with respectively one side face of a brake disc 6, with one of the said friction linings by means of an actuating element, through the actuating unit, being movable into engagement with the brake disc directly, and the other of said friction linings being movable into engagement with the brake disc through the action of a reaction force applied by the brake caliper, wherein the actuating unit comprises an electric motor 1 and a reduction gear 2 and/or 3 operatively disposed between the electric motor and the actuating element, the reduction gear 2 is formed of a threaded drive 17 accommodated by a guide piece 22 axially supported on the brake caliper or a gearbox housing 19 connected to the brake caliper, wherein provided between the guide piece 22 and the brake caliper or the gearbox housing 19 connected to the brake caliper is a sensor device 23 for sensing the reaction force resulting from the actuating force applied by the actuating unit.

Art Unit: 3683

Re-claim 14, the sensor device is connected in a form locking manner (interpreted as pressed fitted) to the gearbox housing and to the guide piece 22, the sensor device is axially locked in the gearbox housing.

Re-claim 15, the sensor device takes up the space between the guide piece and the housing and as such radially guides the guide piece 22.

Re-claim 24, Rieth et al. disclose an actuating unit for an electromechanically actuated disc brake for use with automotive vehicles, which is disposed on a brake caliper accommodating two friction linings 4/5 in a manner limitedly displaceable, cooperating with respectively one side face of a brake disc 6, with one of the said friction linings, by means of an actuating element, through the actuating unit, being brought into engagement with the brake disc directly, and the other of said friction linings being brought into engagement with the brake disc through the action of a reaction force applied by the brake caliper, wherein the actuating unit comprises an electric motor 1 and a reduction gear 2 operatively disposed between the electric motor and the actuating element, the reduction gear 2 comprises a threaded drive 17 accommodated by a guide piece 22 axially supported on the brake caliper or a gearbox housing 19 connected to the brake caliper, on which guide piece is supported a spindle 17 of the threaded drive, with an axial bearing 23 being disposed therebetween, wherein a bearing ring of the axial bearing is designed as a component part of a sensor device 23, which is provided for sensing the reaction force resulting from the actuating force applied by the actuating unit.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3683

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 16, 18 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rieth et al. in view of WO 03/020563 A1 to Beuerle et al.

Re-claims 16, 18 and 21-23, Rieth et al. fail to teach the specifics of the sensor device, in particular the sensor device comprising an annular holder having circumferentially distributed three pressure measuring elements, the pressure measuring elements being square, an electric plug, an electric analyzer, and the strain gauge faces are bridge circuited.

Beuerle et al. teach a sensing device comprising an annular holder 84 with circumferentially distributed three pressure measuring elements 80, see figure 3. Beuerle et al. teach the sensing device having a square configuration with a strain gauge disposed in a plane extending in a direction normal to the admission of the reaction force, the holder is provided with an electric plug (see flexible printed conductor, page 3 paragraph 32) comprising an electric analyzer, the strain gauge faces are bridge circuited. It would have been obvious to one of ordinary skill in the art to have designed the sensing device of Rieth et al. with an annular

Art Unit: 3683

support having three circumferentially disposed pressure measuring devices as taught by Beuerle et al., thus easing the installation of the sensing device within the housing.

US 2004/0163900 is the English language equivalent to WO 03/020563.

14. Claims 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rieth et al. in view of EP 0 432 122 A2 to Adolfsson et al.

Re-claims 16, 17 and 19, Rieth et al. fail to teach the specifics of the sensor device, in particular the sensor device comprising an annular holder having circumferentially distributed three pressure measuring elements, wherein the holder is made from a plastic material and comprises contacting means.

Adolfsson et al. teach sensor device comprising an annular holder made from a plastic material, see abstract, the annular holder comprises contacting means for contacting strain gauge faces. It would have been obvious to one of ordinary skill in the art to have designed the sensor device of Rieth et al. with a plastic annular holder having contacting means for contacting strain gauge faces as taught by Adolfsson et al., thus reducing weight and costs for the annular holder of the sensing device.

Re-claims 16, 18 and 20, Rieth et al. fail to teach the specifics of the sensor device, in particular the sensor device comprising an annular holder having circumferentially distributed three pressure measuring elements of a square type configuration, wherein the contacting means and holder is injected molded from a plastic material.

Adolfsson et al. teach sensor device comprising an annular holder made from a molded plastic material, see abstract, the contacting means is formed as part of the annular holder, the sensors have a square type configuration, see figure 3. It would have been obvious to one of

Art Unit: 3683

ordinary skill in the art to have designed the sensor device of Rieth et al. with a injected molded plastic annular holder having contacting means as taught by Adolfsson et al., thus reducing weight and costs for the annular holder of the sensing device.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. De Vries et al., Backes et al., Kramer and Bayer et al. each teach an actuating unit with a sensing device for sensing a reaction force.

16. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Thomas Williams whose telephone number is 571-272-7128. The examiner can normally be reached on Tuesday from 1:00 PM to 7:00 PM and Wednesday-Friday from 6:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan, can be reached at 571-272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-6584.

**THOMAS J. WILLIAMS
PRIMARY EXAMINER**

TJW

September 20, 2006

Thomas Williams
AJ 3683
9-20-06